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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	Leigh M. Garbowksi
				Examiner Name	2825
Sheet	1	of	4	Attorney Docket Number	SPLX.P0003

RELATED U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Related Application Data
		Number	Date of filing MM-DD-YYYY		
VP	1.	2002/0133798	12-06-2000	Steven Teig et al.	Application regarding related placement technology.
	2.	2002/0073390 S/N 09/737,210	12-13-2000	Steven Teig et al.	Continuation of 2002/0133798
	3.	Preliminary Amendment S/N 09/737,210	12-13-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0073390 does not accurately reflect the claims of S/N 09/737,210.
	4.	S/N 09/737,220	12-13-2000	Steven Teig et al.	Continuation of 2002/0133798
	5.	S/N 09/737,245	12-13-2000	Steven Teig et al.	Continuation of 2002/0133798
	6.	S/N 09/739,460	12-15-2000	Steven Teig et al.	Continuation of present application
	7.	2002/0124231 S/N 09/739,580	12-15-2000	Steven Teig et al.	Continuation of present application
	8.	Preliminary Amendment S/N 09/739,580	12-15-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0124231 does not accurately reflect the claims of S/N 09/739,580.
	9.	S/N 09/739,589	12-15-2000	Steven Teig et al.	Continuation of present application
	10.	S/N 09/742,171	12-19-2000	Steven Teig et al.	Continuation of present application
	11.	2003/0121015 S/N 09/745,067	12-19-2000	Steven Teig et al.	Continuation of present application
	12.	Preliminary Amendment S/N 09/745,067	12-19-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0121015 does not accurately reflect the claims of S/N 09/745,067.
	13.	2002/0069397	01-13-2002	Steven Teig et al.	CIP of the present application.
	14.	2002/0170027	02-20-2002	Steven Teig et al.	CIP of present application
	15.	2002/0157075	02-20-2002	Steven Teig et al.	CIP of present application

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This collection of information is required by 37CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing the burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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				First Named Inventor	Steven Teig
				Group Art Unit	Leigh M. Garbowksi
				Examiner Name	2825
				Attorney Docket Number	SPLX.P0003

RELATED U.S. PATENT DOCUMENTS					
W	16.	2003/0088841 S/N 10/329,241	12-23-2002	Steven Teig et al.	CIP of 2002/0133798
	17.	Preliminary Amendment S/N 10/329,241	12-23-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088841 does not accurately reflect the claims of S/N 10/329,241.
	18.	2003/0018947	12-07-2001	Steven Teig et al.	Application regarding related routing technology
	19.	2002/0147958	10-19-2001	Steven Teig et al.	Application regarding related routing technology
	20.	2003/0079193	12-07-2001	Steven Teig et al.	Application regarding related routing technology
	21.	2003/0063614	01-04-2002	Steven Teig et al.	Application regarding related routing technology
	22.	2003/0064559	01-04-2002	Steven Teig et al.	Application regarding related routing technology
	23.	2003/0063568	01-04-2002	Steven Teig et al.	Application regarding related routing technology
	24.	2003/0101428 S/N 10/040,915	01-05-2002	Steven Teig et al.	Application regarding related routing technology
	25.	Preliminary Amendment S/N 10/040,915	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0101428 does not accurately reflect the claims of S/N 10/040,915.
	26.	2002/0166105 S/N 10/040,948	01-05-2002	Steven Teig et al.	Application regarding related routing technology
	27.	Preliminary Amendment S/N 10/040,948	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0166105 does not accurately reflect the claims of S/N 10/040,948.
	28.	2003/0043827 S/N 10/040,953	01-05-2002	Steven Teig et al.	Application regarding related routing technology
	29.	Preliminary Amendment	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0043827 does not

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				Group Art Unit	Leigh M. Garbowski
				Examiner Name	2825
				Attorney Docket Number	SPLX.P0003

RELATED U.S. PATENT DOCUMENTS						
W		S/N 10/040,953				accurately reflect the claims of S/N 10/040,953.
M	30.	2003/0023943 S/N 10/040,954	01-05-2002	Steven Teig et al.	Application regarding related routing technology	
	31.	Preliminary Amendment S/N 10/040,954	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0023943 does not accurately reflect the claims of S/N 10/040,954.	
	32.	2003/0066042 S/N 10/040,963	01-05-2002	Steven Teig et al.	Application regarding related routing technology	
	33.	Preliminary Amendment S/N 10/040,963	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0066042 does not accurately reflect the claims of S/N 10/040,963.	
	34.	2002/0174412 S/N 10/041,942	01-07-2002	Steven Teig et al.	Application regarding related routing technology	
	35.	Preliminary Amendment S/N 10/041,942	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0174412 does not accurately reflect the claims of S/N 10/040,942.	
	36.	2003/0088844 S/N 10/041,957	01-07-2002	Steven Teig et al.	Application regarding related routing technology	
	37.	Preliminary Amendment S/N 10/041,957	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088844 does not accurately reflect the claims of S/N 10/041,957.	
	38.	2002/0199165 S/N 10/046,864	01-13-2002	Steven Teig et al.	Application regarding related routing technology	
	39.	Preliminary Amendment S/N 10/046,864	01-13-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0199165 does not accurately reflect the claims of S/N 10/046,864.	
	40.	2003/0066043	01-13-2002	Steven Teig et al.	Application regarding related routing technology	

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				Group Art Unit	Leigh M. Garbowksi
				Examiner Name	2825
Sheet	4	of	4	Attorney Docket Number	SPLX.P0003

RELATED U.S. PATENT DOCUMENTS					
	41.	2003/0115566	01-13-2002	Steven Teig	Application regarding related routing technology
	42.	2003/0056187 S/N 10/047,982	01-14-2002	Steven Teig et al.	Application regarding related routing technology
	43.	Preliminary Amendment S/N 10/047,982	01-14-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0056187 does not accurately reflect the claims of S/N 10/047,982.
	44.	2003/0066044	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	45.	2003/0066045	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	46.	2003/0088845 S/N 10/047,978	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	47.	Preliminary Amendment S/N 10/047,978	01-13-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088845 does not accurately reflect the claims of S/N 10/047,978.

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/732,181
Sheet 1 of 3				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2161
				Examiner Name	
				Attorney Docket Number	SPLX.P0003

U.S. PATENTS RELATED TO THE PRESENT APPLICATIONS						
Examiner's Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Relation to Present Application
		Number	Kind Code ² (if known)			
1.		6,516,455	B1	Teig, et al.	02-04-03	

U.S. PATENT DOCUMENTS						
Examiner's Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
2.		2001/0003843	A1	Scepanovic et al.	06-14-01	
3.		4,615,011		Linsker	09-30-86	
4.		5,097,422		Corbin, II et al.	03-17-92	
5.		5,532,934		Rostoker	07-12-96	
6.		5,566,078		Ding et al.	10-15-96	
7.		5,578,840		Scepanovic et al.	11-26-96	
8.		5,634,093		Ashida et al.	05-27-97	
9.		5,636,125		Rostoker et al.	06-03-97	
10.		5,650,653		Rostoker et al.	07-22-97	
11.		5,742,086		Rostoker et al.	04-21-98	
12.		5,757,656		Hershberger et al.	05-26-98	
13.		5,777,360		Rostoker et al.	07-07-98	
14.		5,811,863		Rostoker et al.	09-22-98	
15.		5,822,214		Rostoker et al.	10-13-98	
16.		5,859,449		Kobayashi et al.	01-12-99	
17.		5,898,597		Scepanovic et al.	04-27-99	
18.		5,914,887		Scepanovic et al.	06-22-99	
19.		5,973,376		Rostoker et al.	10-26-99	
20.		6,035,108		Kikuchi	03-07-00	
21.		6,058,254		Scepanovic et al.	05-02-00	

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MAR 17 2003 ^{Substitute for form 1449A/PTO}				Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Telg
				Group Art Unit	2161
				Examiner Name	
Sheet	2	of	3	Attorney Docket Number	SPLX.P0003

U.S. PATENT DOCUMENTS					
W	22.	6,068,662		Scepanovic et al.	05-30-00
	23.	6,123,736		Pavsic et al.	09-26-00
	24.	6,134,702		Scepanovic et al.	10-17-00
	25.	6,155,725		Scepanovic et al.	12-05-00
	26.	6,175,950		Scepanovic et al.	01-16-01
	27.	6,216,252	B1	Dangelo et al.	04-10-01
	28.	6,230,306	B1	Raspopovic et al.	05-08-01
	29.	6,247,167	B1	Raspopovic et al.	06-12-01
	30.	6,249,902	B1	Igusa et al.	06-19-01
	31.	6,260,179	B1	Ohsawa et al.	07-10-01
	32.	6,262,487	B1	Igarashi et al.	07-17-01
	33.	6,289,495	B1	Raspopovic et al.	09-11-01
	34.	6,301,686	B1	Kikuchi et al.	10-09-01
	35.	6,385,758	B1	Kikuchi et al.	05-07-02
	36.	6,401,234	B1	Alpert et al.	06-04-02
	37.	6,405,358	B1	Nuber	06-11-02
	38.	6,412,097	B1	Kikuchi et al.	06-25-02
	39.	6,436,804	B2	Igarashi et al.	08-20-02
	40.	6,463,575	B1	Takahashi	10-08-02

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FOREIGN PATENT DOCUMENTS							
Examiner's Initials	Cite No. ¹	Foreign Patent Document Office ² Number ⁴	Kind Code (If known) ⁵	Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
W	41.	JP	64-15947	Ouchi	01-19-89		

NON PATENT LITERATURE DOCUMENTS

Examiner Signature	<i>[Signature]</i>	Date Considered	2/20/04
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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

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Sheet

3

of

3

Application Number

09/732,181

Filing Date

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First Named Inventor

Steven Teig

Group Art Unit

2161

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Attorney Docket Number

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
	42.	A.H. Farrahi et al., Quality of EDA CAD Tools: Definitions, Metrics and Directions, Quality Electronic Design, 2000, Proceedings of the first International Symposium on March 2000, pp 395-405.	
	43.	C. Chiang, et al., Wirability of Knock-Knee Layouts with 45° Wires, IEEE Transactions on Circuits and Systems, Vol. 38, Issue 6, pp 613-624, June 1991.	
	44.	J. Su et al., Post-Route Optimization for Improved Yield Using Rubber-Band Wiring Model, 1997 International Conference on Computer-Aided Design, pp 700-706, November 1997.	
	45.	J. Vicente, RSR: A New Rectilinear Steiner Minimum Tree Approximation for FPGA Placement and Global Routing, Proceedings of the 24 th Euro Micro Conference, pp 192-195, August 1998.	
	46.	K. Powers et al., The 60° Grid: Routing Channels in Width d/square root 3, VLSI, 1991, Proceedings., First Great Lakes Symposium on Kalamazoo, MI, USA, pp 214-291, March 1991.	
	47.	M. Alexander et al., Performance-Oriented Placement and Routing for field-programmable gate arrays, Proceedings of the European Design Automation Conference, pages 80-85, 1995.	
	48.	M. Alexander et al., Placement and Routing for Performance-Oriented FPGA Layout, VLSI Design, Vol. 7, No. 1, 1998.	
	49.	M. Igarashi et al., A Diagonal-Interconnect Architecture and Its Application to RISC Core Design, 2002 IEEE Solid-State Circuits Conference, pp 210-460, February 2002.	
	50.	P. Dood, et al. A Two-Dimensional Topological Compactor with Octagonal Geometry, 28 th ACM/IEEE Design Automation Conference, pp 727-731, July 1991.	
	51.	P. Parikh, et al., Congestion Driven Quadratic Placement, Proceedings of Design Automation Conference, 1998, pp 275-278.	
	52.	R. Putatunda et al., VITAL: Fully Automatic Placement Strategies for Very Large Semicustom Designs, Proceedings of the International Conference on Computer Design: VLSI in Computers and Processors, pp 434-439 October 1988.	
	53.	S. Dutt, et al., Probability-Based Approaches to VLSI Circuit Partitioning, IEEE Trans. on Computer-Aided Design of IC's and Systems, Vol. 19, No. 5, May 2000, pp 534-549.	
	54.	Y. Sekiyama et al., Timing-Oriented Routers for PCB Layout Design of High-Performance Computers, International Conference on Computer Aided Design, pp 332-335, November 1991.	

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
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Sheet	1	of	7	Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
				Attorney Docket Number	SPLX.P0003

U.S. PATENT DOCUMENTS

Examiner* Initials	Cite No. ¹	U.S. Patent Document Number	Kind Code ² (if known)	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
WT	1.	2001/0009 031	A1	07-19-2001	Nitta et al.	
	2.	2002/0182 844	A1	12-05-2002	Igarashi et al.	
	3.	2003/0025 205	A1	02-06-2003	Shively	
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Sheet	2	of	7	Attorney Docket Number	SPLX.P0003
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Sheet

3

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Application Number	09/732,181
Filing Date	12/6/00
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Group Art Unit	2825
Examiner Name	Leigh M. Garbowski

Attorney Docket Number

SPLX.P0003

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FOREIGN PATENT DOCUMENTS						
Examiner's Initials	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴			
	43.	JP	411296560	A Matsumoto et al.	10-29-1999	with English translation of Abstract;
W	44.	JP	2000-82743	A Igarashi et al.	03-21-2000	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.
	45.	JP	H03-173471	A Tawada et al.	07-26-1991	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.
	46.	JP	H05-243379	A Masako Kubota	09-21-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.
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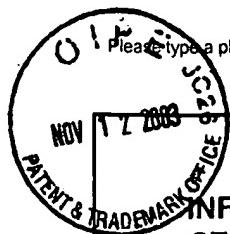
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Sheet	4	of	7	Application Number	09/732,181
				Filing Date	12/6/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
				Attorney Docket Number	SPLX.P0003

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✓	49.	JP	H09-162279	A	Masaaki Yoshida	06-20-1997	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
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				Filing Date	12/6/00
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				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
Sheet	5	of	7	Attorney Docket Number	SPLX.P0003

FOREIGN PATENT DOCUMENTS

NON PATENT LITERATURE DOCUMENTS

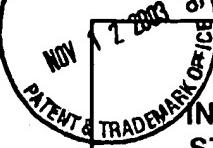
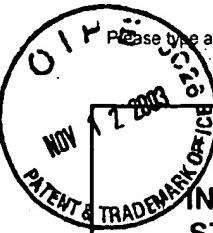
Examiner* Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 6
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				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
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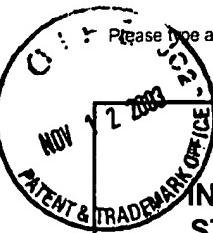
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